

SEQUENCE LISTING

<110> BRIAND, JEAN-PAUL
BOULANGER, PIERRE
BOULANGER, SAW SEE
FRENKEL, VALERIE
GUILLET, JEAN-GERARD
BLONDEL, ARMELLE
LENGAGNE, RENEE

<120> NOVEL IMMUNE BOOSTER COMPOUND, COMPOSITIONS COMPRISING THE
SAME AND METHODS USING SAID BOOSTER COMPOUND

<130> CHEP:016US

<140> UNKNOWN

<141> 2006-01-03

<150> PCT/FR2004/050308

<151> 2004-07-02

<150> FR 03/08239

<151> 2003-7-04

<160> 3

<170> PatentIn Ver. 2.1

<210> 1

<211> 581

<212> PRT

<213> Adenovirus type 5

<400> 1

Met	Lys	Arg	Ala	Arg	Pro	Ser	Glu	Asp	Thr	Phe	Asn	Pro	Val	Tyr	Pro
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Tyr	Asp	Thr	Glu	Thr	Gly	Pro	Pro	Thr	Val	Pro	Phe	Leu	Thr	Pro	Pro
			20					25					30		
Phe	Val	Ser	Pro	Asn	Gly	Phe	Gln	Glu	Ser	Pro	Pro	Gly	Val	Leu	Ser
			35				40						45		
Leu	Arg	Leu	Ser	Glu	Pro	Leu	Val	Thr	Ser	Asn	Gly	Met	Leu	Ala	Leu
		50				55					60				
Lys	Met	Gly	Asn	Gly	Leu	Ser	Leu	Asp	Glu	Ala	Gly	Asn	Leu	Thr	Ser
	65				70					75					80
Gln	Asn	Val	Thr	Thr	Val	Ser	Pro	Pro	Leu	Lys	Lys	Thr	Lys	Ser	Asn
				85					90					95	
Ile	Asn	Leu	Glu	Ile	Ser	Ala	Pro	Leu	Thr	Val	Thr	Ser	Glu	Ala	Leu
			100					105					110		
Thr	Val	Ala	Ala	Ala	Ala	Pro	Leu	Met	Val	Ala	Gly	Asn	Thr	Leu	Thr
			115				120					125			
Met	Gln	Ser	Gln	Ala	Pro	Leu	Thr	Val	His	Asp	Ser	Lys	Leu	Ser	Ile
	130					135						140			

Ala	Thr	Gln	Gly	Pro	Leu	Thr	Val	Ser	Glu	Gly	Lys	Leu	Ala	Leu	Gln	
145					150					155					160	
Thr	Ser	Gly	Pro	Leu	Thr	Thr	Thr	Asp	Ser	Ser	Thr	Leu	Thr	Ile	Thr	
				165					170					175		
Ala	Ser	Pro	Pro	Leu	Thr	Thr	Ala	Thr	Gly	Ser	Leu	Gly	Ile	Asp	Leu	
			180					185					190			
Lys	Glu	Pro	Ile	Tyr	Thr	Gln	Asn	Gly	Lys	Leu	Gly	Leu	Lys	Tyr	Gly	
		195					200					205				
Ala	Pro	Leu	His	Val	Thr	Asp	Asp	Leu	Asn	Thr	Leu	Thr	Val	Ala	Thr	
	210					215					220					
Gly	Pro	Gly	Val	Thr	Ile	Asn	Asn	Thr	Ser	Leu	Gln	Thr	Lys	Val	Thr	
225					230					235					240	
Gly	Ala	Leu	Gly	Phe	Asp	Ser	Gln	Gly	Asn	Met	Gln	Leu	Asn	Val	Ala	
				245					250					255		
Gly	Gly	Leu	Arg	Ile	Asp	Ser	Gln	Asn	Arg	Arg	Leu	Ile	Leu	Asp	Val	
			260					265					270			
Ser	Tyr	Pro	Phe	Asp	Ala	Gln	Asn	Gln	Leu	Asn	Leu	Arg	Leu	Gly	Gln	
		275					280					285				
Gly	Pro	Leu	Phe	Ile	Asn	Ser	Ala	His	Asn	Leu	Asp	Ile	Asn	Tyr	Asn	
	290					295					300					
Lys	Gly	Leu	Tyr	Leu	Phe	Thr	Ala	Ser	Asn	Asn	Ser	Lys	Lys	Leu	Glu	
305					310					315					320	
Val	Asn	Leu	Ser	Thr	Ala	Lys	Gly	Leu	Met	Phe	Asp	Ala	Thr	Ala	Ile	
				325					330					335		
Ala	Ile	Asn	Ala	Gly	Asp	Gly	Leu	Glu	Phe	Gly	Ser	Leu	Asn	Ala	Pro	
			340					345					350			
Asn	Ser	Asn	Pro	Leu	Lys	Thr	Lys	Ile	Gly	His	Gly	Leu	Glu	Phe	Asp	
		355					360					365				
Ser	Asn	Lys	Ala	Met	Val	Pro	Lys	Leu	Gly	Thr	Gly	Leu	Ser	Phe	Asp	
	370					375					380					
Ser	Thr	Gly	Ala	Ile	Thr	Val	Gly	Asn	Lys	Asn	Asn	Asp	Lys	Leu	Thr	
385					390					395					400	
Leu	Trp	Thr	Thr	Pro	Ala	Pro	Ser	Pro	Asn	Cys	Arg	Leu	Asn	Ala	Glu	
				405					410					415		
Lys	Asp	Ala	Lys	Leu	Thr	Leu	Val	Leu	Thr	Lys	Cys	Gly	Ser	Gln	Ile	
			420					425					430			
Leu	Ala	Thr	Val	Ser	Val	Leu	Ala	Val	Lys	Gly	Ser	Leu	Ala	Pro	Ile	
		435					440					445				
Ser	Gly	Thr	Val	Gln	Ser	Ala	His	Leu	Ile	Ile	Arg	Phe	Asp	Glu	Asn	

450	455	460
Gly Val Leu Leu Asn Asn Ser Phe Leu Asp Pro Glu Tyr Trp Asn Phe 465 470 475 480		
Arg Asn Gly Asp Leu Thr Glu Gly Thr Ala Tyr Thr Asn Ala Val Gly 485 490 495		
Phe Met Pro Asn Leu Ser Ala Tyr Pro Lys Ser His Gly Lys Thr Ala 500 505 510		
Lys Ser Asn Ile Val Ser Gln Val Tyr Leu Asn Gly Asp Lys Thr Lys 515 520 525		
Pro Val Thr Leu Thr Ile Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp 530 535 540		
Thr Thr Pro Ser Ala Tyr Ser Met Ser Phe Ser Trp Asp Trp Ser Gly 545 550 555 560		
His Asn Tyr Ile Asn Glu Ile Phe Ala Thr Ser Ser Tyr Thr Phe Ser 565 570 575		
Tyr Ile Ala Gln Glu 580		

<210> 2
 <211> 319
 <212> PRT
 <213> Adenovirus type 3

<400> 2
Met Ala Lys Arg Ala Arg Leu Ser Thr Ser Phe Asn Pro Val Tyr Pro 1 5 10 15
Tyr Glu Asp Glu Ser Asn Leu Gln His Pro Phe Ile Asn Pro Gly Phe 20 25 30
Ile Ser Pro Asp Gly Phe Thr Gln Ser Pro Asn Gly Val Leu Ser Leu 35 40 45
Lys Cys Val Asn Pro Leu Thr Thr Ala Ser Gly Ser Leu Gln Leu Lys 50 55 60
Val Gly Ser Gly Leu Thr Val Asn Thr Thr Asp Gly Ser Leu Glu Glu 65 70 75 80
Asn Ile Lys Val Asn Thr Pro Leu Thr Lys Ser Asn His Ser Ile Asn 85 90 95
Leu Pro Ile Gly Asn Gly Leu Gln Ile Glu Gln Asn Lys Leu Cys Ser 100 105 110
Lys Leu Gly Asn Gly Leu Thr Phe Asp Ser Ser Asn Ser Ile Ala Leu 115 120 125
Lys Asn Asn Thr Leu Trp Thr Gly Pro Lys Pro Glu Ala Asn Cys Ile 130 135 140
Ile Glu Tyr Gly Lys Glu Asn Pro Asp Ser Lys Leu Thr Leu Ile Leu

145		150		155		160
Val Lys Asn Gly Gly Ile Val Asn Gly Tyr Val Thr Leu Met Gly Ala	165		170		175	
Ser Asp Tyr Val Asn Thr Leu Phe Lys Asn Lys Asn Val Ser Ile Asn	180		185		190	
Val Glu Leu Tyr Phe Asp Ala Thr Gly His Ile Leu Pro Asp Leu Ser	195		200		205	
Ser Leu Lys Thr Asp Leu Gln Leu Lys Tyr Lys Gln Thr Thr His Phe	210		215		220	
Ser Ala Arg Gly Phe Met Pro Ser Thr Thr Ala Tyr Pro Phe Val Leu	225		230		235	240
Pro Asn Ala Gly Thr Asp Asn Glu Asn Tyr Ile Phe Gly Gln Cys Tyr	245		250		255	
Tyr Lys Ala Ser Asp Gly Ala Leu Phe Pro Leu Glu Val Thr Val Thr	260		265		270	
Leu Asn Lys Arg Leu Pro Asp Ser Arg Thr Ser Tyr Val Met Thr Phe	275		280		285	
Leu Trp Ser Leu Asn Ala Gly Leu Ala Pro Glu Thr Thr Gln Ala Thr	290		295		300	
Leu Ile Thr Ser Pro Phe Thr Phe Ser Tyr Ile Arg Glu Asp Asp	305		310		315	

<210> 3
 <211> 587
 <212> PRT
 <213> Adenovirus type 12

<400> 3

Met Lys Arg Ser Arg Thr Gln Tyr Ala Glu Glu Thr Glu Glu Asn Asp	1	5	10	15
Asp Phe Asn Pro Val Tyr Pro Phe Asp Pro Phe Asp Thr Ser Asp Val	20	25	30	
Pro Phe Val Thr Pro Pro Phe Thr Ser Ser Asn Gly Leu Gln Glu Lys	35	40	45	
Pro Pro Gly Val Leu Ala Leu Asn Tyr Lys Asp Pro Ile Val Thr Glu	50	55	60	
Asn Gly Thr Leu Thr Leu Lys Leu Gly Asp Gly Ile Lys Leu Asn Ala	65	70	75	80
Gln Gly Gln Leu Thr Ala Ser Asn Asn Ile Asn Val Leu Glu Pro Leu	85	90	95	
Thr Asn Thr Ser Gln Gly Leu Lys Leu Ser Trp Ser Ala Pro Leu Ala	100	105	110	

Val	Lys	Ala	Ser	Ala	Leu	Thr	Leu	Asn	Thr	Arg	Ala	Pro	Leu	Thr	Thr
		115					120					125			
Thr	Asp	Glu	Ser	Leu	Ala	Leu	Ile	Thr	Ala	Pro	Pro	Ile	Thr	Val	Glu
		130				135					140				
Ser	Ser	Arg	Leu	Gly	Leu	Ala	Thr	Ile	Ala	Pro	Leu	Ser	Leu	Asp	Gly
145				150						155					160
Gly	Gly	Asn	Leu	Gly	Leu	Asn	Leu	Ser	Ala	Pro	Leu	Asp	Val	Ser	Asn
				165					170					175	
Asn	Asn	Leu	His	Leu	Thr	Thr	Glu	Thr	Pro	Leu	Val	Val	Asn	Ser	Ser
			180				185						190		
Gly	Ala	Leu	Ser	Val	Ala	Thr	Ala	Asp	Pro	Ile	Ser	Val	Arg	Asn	Asn
		195					200					205			
Ala	Leu	Thr	Leu	Pro	Thr	Ala	Asp	Pro	Leu	Met	Val	Ser	Ser	Asp	Gly
		210				215					220				
Leu	Gly	Ile	Ser	Val	Thr	Ser	Pro	Ile	Thr	Val	Ile	Asn	Gly	Ser	Leu
225					230					235					240
Ala	Leu	Ser	Thr	Thr	Ala	Pro	Leu	Asn	Ser	Thr	Gly	Ser	Thr	Leu	Ser
				245					250					255	
Leu	Ser	Val	Ala	Asn	Pro	Leu	Thr	Ile	Ser	Gln	Asp	Thr	Leu	Thr	Val
			260					265					270		
Ser	Thr	Gly	Asn	Gly	Leu	Gln	Val	Ser	Gly	Ser	Gln	Leu	Val	Thr	Arg
		275					280					285			
Ile	Gly	Asp	Gly	Leu	Thr	Phe	Asp	Asn	Gly	Val	Met	Lys	Val	Asn	Val
		290				295					300				
Ala	Gly	Gly	Met	Arg	Thr	Ser	Gly	Gly	Arg	Ile	Ile	Leu	Asp	Val	Asn
305					310					315					320
Tyr	Pro	Phe	Asp	Ala	Ser	Asn	Asn	Leu	Ser	Leu	Arg	Arg	Gly	Leu	Gly
				325					330					335	
Leu	Ile	Tyr	Asn	Gln	Ser	Thr	Asn	Trp	Asn	Leu	Thr	Thr	Asp	Ile	Ser
			340					345					350		
Thr	Glu	Lys	Gly	Leu	Met	Phe	Ser	Gly	Asn	Gln	Ile	Ala	Leu	Asn	Ala
		355					360					365			
Gly	Gln	Gly	Leu	Thr	Phe	Asn	Asn	Gly	Gln	Leu	Arg	Val	Lys	Leu	Gly
		370				375					380				
Ala	Gly	Leu	Ile	Phe	Asp	Ser	Asn	Asn	Asn	Ile	Ala	Leu	Gly	Ser	Ser
385					390					395					400
Ser	Asn	Thr	Pro	Tyr	Asp	Pro	Leu	Thr	Leu	Trp	Thr	Thr	Pro	Asp	Pro
				405					410					415	
Pro	Pro	Asn	Cys	Ser	Leu	Ile	Gln	Glu	Leu	Asp	Ala	Lys	Leu	Thr	Leu
			420					425					430		
Cys	Leu	Thr	Lys	Asn	Gly	Ser	Ile	Val	Asn	Gly	Ile	Val	Ser	Leu	Val

435					440					445						
Gly	Val	Lys	Gly	Asn	Leu	Leu	Asn	Ile	Gln	Ser	Thr	Thr	Thr	Thr	Val	
450					455					460						
Gly	Val	His	Leu	Val	Phe	Asp	Glu	Gln	Gly	Arg	Leu	Ile	Thr	Ser	Thr	
465					470					475					480	
Pro	Thr	Ala	Leu	Val	Pro	Gln	Ala	Ser	Trp	Gly	Tyr	Arg	Gln	Gly	Gln	
485					490					495						
Ser	Val	Ser	Thr	Asn	Thr	Val	Thr	Asn	Gly	Leu	Gly	Phe	Met	Pro	Asn	
500					505					510						
Val	Ser	Ala	Tyr	Pro	Arg	Pro	Asn	Ala	Ser	Glu	Ala	Lys	Ser	Gln	Met	
515					520					525						
Val	Ser	Leu	Thr	Tyr	Leu	Gln	Gly	Asp	Thr	Ser	Lys	Pro	Ile	Thr	Met	
530					535					540						
Lys	Val	Ala	Phe	Asn	Gly	Ile	Thr	Ser	Leu	Asn	Gly	Tyr	Ser	Leu	Thr	
545					550					555					560	
Phe	Met	Trp	Ser	Gly	Leu	Ser	Asn	Tyr	Ile	Asn	Gln	Pro	Phe	Ser	Thr	
565					570					575						
Pro	Ser	Cys	Ser	Phe	Ser	Tyr	Ile	Thr	Gln	Glu						
580					585											